assure proper location. The friction sleeve is clamped in place by a strap which, in this case, does not form an integral part of the jig. This arrangement, however, is cheaper than it would have been to carry up two small projections on two sides of the jig and employ a swinging leaf and an eye-bolt, or some arrangement of this kind. Besides, the strap is rather large, and could not easily get lost. The jig necessarily has a number of loose parts, on account of being designed to accommodate different details of the friction clutch.

The friction disks C, in Fig. 16, when drilled, fit directly over the projecting finished part H of the jig, and are located on this

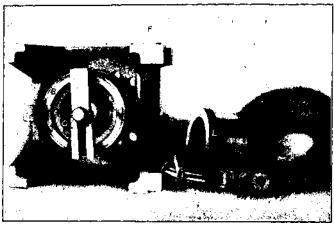


Fig. 18. Drill Jig shown in Fig. 16 used for Drilling Friction Sleeve

projection by a square key. The work is brought up against the bottom of the jig and held in this position by the strap shown in Fig. 18 for holding the friction sleeve. The bushings of different sizes shown in Fig. 18 are used for drilling the different sized holes in the different parts.

In all the various types of drill jigs described, the thrust of the cutting tools is taken by the clamping arrangement. In many cases, however, no actual clamping arrangements are used, but the work itself takes the thrust of the cutting tools, and the locating means are depended upon to hold the piece or jig in the right position when performing the drilling operation.